

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755330006-1

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755330006-1"

VOLODINA, M.A.; KUDRYASHOVA, V.A.; TERENT'YEV, A.P.

Synthesis of pyrrolidines, pyrrolines, and pyrroles. Part 13:  
synthesis of pyrroline derivatives based on  $\beta$ -chlorovinyl  
aldehydes. Zhur. ob. khim. 34 no.9:3130-3131 S '64.  
(MIRA 17:11)

FUTILOVA, G.N.; RUDEHED, H.V., 1. INT'LY, A.I.

Protective action of ascorbic acid on the dissolution of iron  
in hydrochloric acid. Zash. fiz. khim. 38 no.2.1962-196 F '63.  
(MIRA 17:8)

1. Moskovskiy tekhnologicheskii institut pishchevoy promysh-  
lennosti.

TERENT'YEV, A.P.; GRACHEVA, R.A.; TITOVA, L.F.; DELENKO, T.F.

New method for the production of optically active aspartic acid. Dokl.  
AN SSSR 154 no.6:1406-1408 F '64. (MIRA 1712)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova. 2. Chlen-  
korrespondent AN SSSR (for Terent'yev).

ACCESSION NR: AP4030786

S/0020/64/155/004/0872/0873

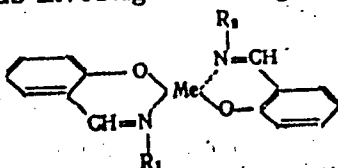
AUTHOR: Terent'yev, A. P. (Corresponding member AN SSSR); Rukhadze; Ye. G.; Panova, G. V.

TITLE: Tetra-coordinated chelates with unevenly paired ligands

SOURCE: AN SSSR. Doklady\*, v. 155, no. 4, 1964, 872-873

TOPIC TAGS: chelate, evenly paired ligand, unevenly paired ligand, salicylal phenylethylimine, polarimetric titration, racemic mixture, optically active compound, optically active compound separation, tetra coordinated chelate

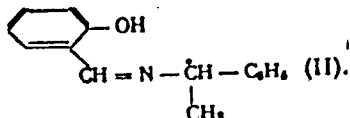
ABSTRACT: The possibility of obtaining chelates in which the metal is attached to two different ligands was investigated using compounds of the type A:



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ACCESSION NR : AP4030786

in which  $R_1 = \text{CH}_3$ - and  $R_2 = \text{C}_6\text{H}_5$ -,  $\text{C}_6\text{H}_5\text{CH}_2$ - or  $\text{C}_6\text{H}_5\text{CH}(\text{CH}_3)$ -. X-rays showed the products formed were mechanical mixtures of materials with paired ligands  $R_1 = R_2$ . Experiments were then run with levo- and dextrorotatory salicylal alpha-phenylethylimine II:



where the differences in  $R_1$  and  $R_2$  is caused by their configuration. Polarimetric titration of a solution of mixed l- and d-salicylal-alpha-phenylethylimine with copper acetate established that a mixture of chelates with evenly paired ligands (in a ratio approximating the l- and d- form of the original amine) was formed in the solution. On crystallization a racemic mixture precipitated, leaving the solution enriched in the optically active form. Thus the optically active part of the amine may be separated from its racemate by crystallization. Experiments run with bis-(alpha-phenylethyldithiocarbamate)-nickel did not give positive results. In the type A compounds, the chelates most favored energetically are those in which  $R_1 = R_2$ , i. e., chelates with evenly paired ligands. Orig. art. has: 1 table and 2 formulas.

Card 2 / 3

ACCESSION NR: AP4030786

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova  
(Moscow State University)

SUBMITTED: 16Nov63

ATD PRESS: 3071

ENCL: 00

SUB CODE: OC, GC

NO REF SOV: 000

OTHER: 003

Card 3/3

ACCESSION NR: AP4040960

S/0020/64/156/005/1174/1177

AUTHOR: Terent'yev, A. P.; Panova, G. V.; Shigorin, D. N.; Rukhadze, Ye. G.

TITLE: EPR spectra of optically-active chelate compounds of copper with oxyaldimines and oxyketimines

SOURCE: AN SSSR. Doklady\*, v. 156, no. 5, 1964, 1174-1177

TOPIC TAGS: EPR, EPR spectrum, chelate compound, optically-active chelate compound, copper, copper compound, copper chelate compound, aldimine compound, ketimine compound, copper-oxyaldimine compound, copper-oxyketimine compound

ABSTRACT: It is a well-known fact that the degree of delocalization of an unpaired electron can be studied directly by the electron paramagnetic resonance method. Hence, one and the same structural peculiarities of molecules can be found in the optical activity and EPR spectra. With this in mind, the authors studied the EPR spectra of the titled chelate compounds of copper. The analysis was carried out on a superheterodyne EPR spectrometer with a frequency of 9455 mc. All of the compounds in a chloroform solution produce EPR spectra which are characterized by four lines of a superfine structure, which originate as the result of the interaction of the copper atom's nuclear moment ( $I_{Cu} = 3/2$ ) with the

Card 1/4



ACCESSION NR: AP4040960

magnetic spire moment of the unpaired electron. An additional superfine structure composed of five lines manifested itself in the EPR spectra for compounds II, IV and V of the Figure of Enclosure 01. The possibility of disrupting the molecular coplanarity is the greatest with these compounds. The additional superfine structure did not appear in the EPR spectra for compounds I and III. The assumption could be made that this is associated with the ability of chelates I and III, as the more coplanar, to form associates. Actually, the formation of associates could lead to the elimination of the additional superfine structure owing to the origination of a dipole spin-spin interaction. The presence of the additional hyperfine structure in the II, IV and V compounds and its absence in the I and III compounds can only be explained by the peculiarities of the molecular structure, especially by the intensive disruption of their coplanarity through the introduction of the CH<sub>3</sub> group instead of the aldehyde group's hydrogen atom. Disruption of the coplanarity produces an essential influence on the distribution of the electron density of the unpaired electron in the molecule. Authors conclude that one and the same structural peculiarities of the investigated copper chelate compounds, associated with disruption of the molecular coplanarity under the effects of steric factors produce a change in the compound's optical activity and EPR spectra. "Authors thank N. V. Vereyna and N. A. Begunova for their help in conducting the experiment." Orig. art. has: 3 figures.

Cord 2/4

ACCESSION NR: AP4Q40960

SUBMITTED: 17Mar64

SUB CODE: OP, IC

NO REF SOV: 007

ENCL: 01

OTHER: 002

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova (Physico-chemical  
Institute); Moskovskiy Gosudarstvennyy im. M. V. Lomonosova (Moscow State University)  
universitet

Card 3/4

POTAPOV, V.M.; TORONT'YEV, A.P.; GEROVA L.I.

Dispersion of the optical rotation of 1-(2-phenethyl-6-prenyl-4-piperidone). Dokl. AN SSSR 157 no. 2420-421 J1 1964.  
(FILA 1717)

1. Chlen-korrespondent AN SSSR (Per Toront'ev).

POTAPOV, V.M.; TEREENT'YEV, A.I.; DANG N'Y TAY

Effect of the solvent on the rotatory dispersion of acylamino acids.  
Dokl. AN SSSR 158 no.5:1136-1138 0 '64. (MIRA 17:10)

1. Moskovskiy gosudarstvennyy universitet im. Lomonosova. 2. Chlen-  
korrespondent AN SSSR (for Terent'yev).

lc

L 36631-65 EMT(m)/EPF(c)/EWP(j)/T Pc-4/Pr-4 RM  
ACCESSION NR: AP5001514 S/0020/64/159/005/1059/1061 34  
32B

AUTHOR: Anufriyenko, V. G.; Mamayeva, Ye. K.; Keyyer, N. P.; Kefeli, L. M.;  
Rukhadze, Ye. G.; Terent'yev, A. P. (Corresponding member AN SSSR)  
TITLE: Study of the EPR spectra of Cu(II)  $\alpha$ -thiopicolinanilide complex /

SOURCE: AN SSSR. Doklady, v. 159, no. 5; 1964, 1059-1061

TOPIC TAGS: chemical structure, electron paramagnetic resonance, chelate complex, copper alpha-thiopicolinanilide complex

ABSTRACT: It is of great importance to investigate the electronic structure of monomeric links of chelate polymers. This article presents the results of the investigation of the EPR spectra of Cu(II)  $\alpha$ -thiopicolinanilide complex (CuII-TPA) in the polycrystalline state and in solutions. The structure of this complex, which is a monomer analog of chelate polymers, is shown in figure 1. This complex was obtained as a brown crystalline precipitate by reacting  $\alpha$ -thiopicolinanilide with cupric acetate in a methanolic medium. The EPR spectrum of CuII-TPA is shown in figure 2. It is concluded on the basis of this work that CuII-TPA is a

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L 36631-65

ACCESSION NR: AP5001514

coplanar complex in which the Cu-N bond and the Cu-S bond are predominantly covalent. Orig. art. has: 3 figures

ASSOCIATION: Institut kataliza Sibirskogo otdeleniya Akademii nauk SSSR  
(Institute of Catalysis of the Siberian Branch of the Academy of Sciences, SSSR);  
Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University)

SUBMITTED: 01Aug64

ENCL: 02

SUB CODE: OC, NP

NR REF SOV: 007

OTHER: 003

Card 2/4

PAVLOV, Boris Alekseyevich; TERENT'YEV, Aleksandr Petrovich,  
prof. Prinimal uchastiye KORSUNSKIY, O.V.; RUKHADZE,  
Ye.G.; ZITSEN, A.I., red.

[Course in organic chemistry] Kurs organicheskoi khimii.  
Izd.5., perer. Moskva, Khimiia, 1965. 686 p.  
(MIRA 18:5)

1. Chlen-korrespondent AN SSSR (for Terent'yev).

L 3666-66 EWT(m)/EPF(c)/EWP(j) RM  
 ACCESSION NR: AP5017841

UR/0286/65/000/011/0078/0078  
 678.763.043

AUTHOR: Terent'yev, A. P.; Yermolayev, A. V.; Rukhadze, Ye. G.; Ipozentseva, A. V.;  
 Bobrova, N. I.; Malaya, Z. I.; Lobova, A. N.

TITLE: Vulcanization process for fluorocarbon elastomers. Class 39, No. 171567

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 11, 1965, 78

TOPIC TAGS: fluorocarbon elastomer, vulcanization, vulcanizing agent

ABSTRACT: An Author Certificate has been issued for vulcanizing agents for fluoro-  
 carbon elastomers. To improve the physical and mechanical properties of the vulcan-  
 izates and to simplify the vulcanization process, the vulcanizing agents used are  
 cobalt N, N'-ethylenebis(salicylideneimine) and/or titanium salicylideneimine. [SM]

ASSOCIATION: none

SUBMITTED: 21Apr62

ENCL: 00

SUB CODE: MT

NO REF SOV: 000

OTHER: 000

ATD PRESS: 4047

Card 1/1



POTAPOV, V.M.; TERENT'YEV, A.P.; SEROVA, L.I.

Stereochemical studies. Part 21: Dispersion of the optical  
rotation of 3-amino-3-phenylpropionitrile. Zhur. org. khim.  
1 no.8:1444-1447 Ag '65. (MIRA 18:11)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

107707, "111" ... 111111, 111...

Dispersion of the rotation of some substituted phenylethylamine  
active  $\alpha$ -phenylethylamine. Vest. Mosk. un. Ser. N: Khim. 46  
no. 1: 50-51, 1963. (MIRA 10:3)

1. Kazanskii khimicheskii knizh. knizhstvo universiteta.

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POPOV, V.M.; YAKIMENKO, A.I.; KOLYAKIN, G.I.

Spectroscopic analysis. Report No. 5: Determination of  
o-methoxybenzaldehyde in the presence of benzaldehyde.  
Zhur. anal. khim. 20 no. 6: 735-738, 1985. (Chem. Abstr.)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

TERENT'YEV, A.P.; NOVIKOVA, I.S.

Sodium borohydride in organic analysis. Report 1: Determination  
of carbonyl group in organic materials. Zhur. anal. khim. 20  
no.7:836-841 '65. (MIRA 18:9)

1. Lomonosov Moscow State University.

1 29147-66 ENP(1)/ENI(m) RM

ACC NR: AP6018677

SOURCE CODE: UR/0075/65/020/009/0990/0993

AUTHOR: Luskina, B. M.; Terent'yev, A. P.; Gradska, N. A.

ORG: none

TITLE: Organoelemental analysis by the "wet oxidation method". Report 9. Analysis of  
silicotitanophosphoroorganic compounds  
SOURCE: Zhurnal analiticheskoy khimii, v. 20, no. 9, 1965, 990-993

TOPIC TAGS: ion exchange resin, organic phosphorous compound, organosilicon  
compound, organotitanium, photometry, quantitative analysis

ABSTRACT: A method was developed to determine the content of  
silicon, titanium, and phosphorus in silicotitanophosphoroorganic  
compounds using a single sample. Ion exchange resins were found  
to be useful. It was established that in the analysis of silico-  
titanophosphoroorganic compounds titanium does not interfere with  
the determination of phosphorus but phosphates interfere with the  
photometric determination of titanium with hydrogen peroxide. So  
optimum conditions were selected for separating titanium from  
phosphorus with the KU-2 resin after oxidation of the analyzed  
compounds by the "wet" method. When a solution containing these  
elements is passed through a column packed with KU-2 resin, tita-  
nium is retained by the resin but phosphorus (as phosphoric acid)

Cord 1/2

UDC: 543.80

L 29147-66

ACC NR: AP6018677

passes into the filtrate. Completeness of titanium separation is controlled with hydrogen peroxide. Further, titanium is washed from the column with a 4 N solution of hydrochloric acid and determined photometrically. If the acidity of the solution does not exceed 2 vol. % of sulfuric acid, titanium is completely separated from phosphorus. The volume of solution passed through the column was 100 ml at the rate of 5 ml/min. The optimal conditions were confirmed both on titanophosphoroorganic compounds and also in a silicoorganic compound containing titanium and phosphorus. Results are presented in a table, Ye. D. Kropotova participated in the experimental work. Orig. art. has: 2 tables. [JPRS]

SUB CODE: 07 / SUBM DATE: 29May64 / ORIG REF: 005 / OTH REF: 002

Card 2/2 CC



L 11689-66 EWT(m)/ENP(t)/ENP(b) IJP(c) JD  
ACC NR: AP6005878 SOURCE CODE: UR/0075/65/020/010/1054/1058 43

AUTHOR: Terent'yev, A. P.; Larikova, G. G.; Bondarevskaya, Ye. A.; Pravidlo, G. Ye.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet)

TITLE: Lithium aluminum hydride in analysis. Report No. 2. Determination of lithium aluminum hydride content

SOURCE: Zhurnal analiticheskoy khimii, v. 20, no. 10, 1965, 1054-1058

TOPIC TAGS: hydride, lithium compound, aluminum compound, volumetric analysis

ABSTRACT: A previously described technique for determining active hydrogen in organic substances by means of  $\text{LiAlH}_4$  was used to check the lithium aluminum hydride content of ether solutions and the composition of solid  $\text{LiAlH}_4$ . A weighed sample was decomposed with ethyl alcohol, and the hydrogen evolved was driven with the vapor of the boiling ether into an azotometer filled with a 1:1 water-ethanol mixture, which absorbed the ether vapor. From the azotometer, the hydrogen was transferred into a eudiometer for volume measurement. Analysis of three samples of 100%  $\text{LiAlH}_4$

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2

L 14689-66

ACC NR: AP6005878

showed that the error does not exceed  $\pm 1\%$ , and the results are in good agreement with the end hydrogen analysis. The method can be used for the analysis of sodium aluminum hydride and other hydrides. Orig. art. has: 4 figures, 3 tables.

SUB CODE: 07/ SUBM DATE: 03Oct64/ ORIG REF: 005/ OTH REF: 009

BVK  
Card 2/2

TERENT'YEV, A.P.; NOVIKOVA, I.S.

Sodium borohydride in organic analysis. Report 2: Analysis  
of sugars. Zhur. anal. khim. 20 no. 11:1226-1227 '65  
(MIRA 19:1)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomo-  
nosova. Submitted December 8, 1964.

LEZHNEV, N.N.; THERENT'YEV, A.P.; NOVIKOVA, I.S.; KOBZEVA, T.A.

Using the bromination method for the testing of carbon black. Kauch.  
i rez. 24 no.9:16-20 '65. (MIRA 18:10)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti i  
Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.



"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755330006-1

AUTHOR: Terent'yev, A.P.; Rukhadze, Ye. G.; Panova, G.V.; Viktorova, N.M.

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CIA-RDP86-00513R001755330006-1"



101- 11, 111, 111111111111, 1111, 111111111111.

Chemical studies. Part 19. Effect of a solvent on the  
solubility dispersion of amides. Zhur. khim. 15 no. 8:1340-  
1342 Ag '65. (MIRA 18:8)

1. Moskovskiy gosudarstvennyy universitet.

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**APPROVED FOR RELEASE: 07/16/2001**

**CIA-RDP86-00513R001755330006-1"**

VOLODINA, M.A.; KIRYUSHKINA, G.V.; TEREENT'YEV, A.P.

Synthesis of cycloalkano-2,3-pyrolidines and steric course of  
Loikart's reaction. Dokl. AN SSSR 162 no.1:90-93 My '65. (MIRA 18:5)

1. Moskovskiy gosudarstvennyy universitet. 2. Chlen-korrespondent  
AN SSSR (for Terent'yev).

TERENT'YEV, A.P.; GRACHEVA, R.A.; DEDENKO, T.F.

Synthesis of optical isomers of  $\beta$ -aminobutyric acid. Dokl. AN SSSR  
163 no.2:386-389 J1 '65. (MIRA 18:7)

1. Moskovskiy gosudarstvennyy universitet. 2. Chlen-korrespondent  
AN SSSR (for Terent'yev).

TERENT'YEV, A.P.; VOLODINA, M.A.; KUDYRASHOVA, V.A.

Structure of Schiff's bases of N-arylpyrrolines. Dokl. AN SSSR  
164 no.1:115-118 S '65. (MIRA 18:9)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
2. Chlen-korrespondent AN SSSR (for Terent'yev).



TERENT'YEV, A.P.; STROGANOV, N.S.; RUKHADZE, Ye.G.; KHOBOT'YEV, V.G.

Use of polymetallic ores and their products as algicides. Dokl.  
AN SSSR 164 no.4:928-930 O 1965. (MIRA 18:10)

1. Moskovskiy gosudarstvennyy universitet. 2. Chlen-korrespondent  
AN SSSR (for Terent'yev).

L 42161-66 EWP(j)/EWT(m)/T RM/RH

ACC NR: AP6021608

SOURCE CODE: UR/0020/66/168/005/1082/1084

AUTHOR: Terent'yev, A. P. (Corresponding member AN SSSR); Rukhadze, Ye. G.;  
Kharakhorin, F. F.; Petrov, V. M.

41  
38  
B

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet)

TITLE: Diffuse reflection spectra of polychelates

SOURCE: AN SSSR. Doklady, v. 168, no. 5, 1966, 1082-1084

TOPIC TAGS: chelate compound, light reflection coefficient

ABSTRACT: Considering that polychelates (high molecular compounds containing metals) are finely dispersed colored compounds sparingly soluble in organic solvents, the authors chose the method of diffuse reflection spectra to establish the correlation between the structure of a chelate or polychelate and its optical characteristics (reflection coefficient). Copper chelates were investigated. The spectra were taken with the instruments SF-10 (visible) and IKS-12 with an IPO-12 attachment (infrared), and found to be similar for the monomer and corresponding polymer. Polychelates obtained at higher temperatures were found to have a more regular network structure than those obtained at lower temperatures. It is concluded that the study of diffusion reflection spectra constitutes a reliable method for identifying the structure of the chelates (network, linear) and determining the degree of its perfection. Authors thank O. D.

Card 1/2

UDC: 543.4.422.4

L 42161-66

ACC NR: AP6021608

Yesayashvili for participating in the experiments, and Z. V. Zvonkov and V. M. Vozzhennikov for a useful discussion. Orig. art. has: 3 figures and 1 table.

SUB CODE: 07/ SUBM DATE: 24Nov65/ ORIG REF: 006/ OTH REF: 001

ms  
Card 2/2

L 41220-56 FMT(m)/TMT(1)

ACC NR: AP6023209

SOURCE CODE: UR/0020/66/168/006/1327/1330

AUTHOR: Kolninov, O. V.; Terent'yev, A. P. (Corresponding member AN SSSR); Zvonkova, Z. V.; Rukhadze, Ye. G.

ORG: Physicochemical Institute im. L. Ya. Karpov (Fiziko-khimicheskiy institut); Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet)

TITLE: Study of the photoemf and electron spectra of certain dithiocarbamate compounds of transition metals

SOURCE: AN SSSR. Doklady, v. 168, no. 6, 1966, 1327-1330

TOPIC TAGS: cholate compound, transition metal compound, electron spectrum, photoconductivity, photo emf

ABSTRACT: Curves of the spectral distribution of photoemf were recorded in the range of 42,000-12,000  $\text{cm}^{-1}$  for the four chelates  $\text{Cu}[(\text{C}_2\text{H}_5)_2\text{NCS}_2]_2$ ,  $\text{Cu}[(\text{CH}_2)_6\text{NCS}_2]_2$ ,  $\text{Ni}[(\text{C}_2\text{H}_5)_2\text{NCS}_2]_2$  and  $\text{Co}[(\text{C}_2\text{H}_5)_2\text{NCS}_2]_2$ . The electron absorption spectra were measured with an SP-700 recording spectrophotometer. Four types of new bands were found: (1) d-d, due to transitions between split levels of the central metal atom, (2) bands of charge transfer between atoms of the ligand and metal ( $\pi$ -d transitions), (3) bands of charge transfer between atoms of ligand and metal in  $\sigma$  orbitals, and (4) bands corresponding to transitions within the  $\text{NCS}_2$  ligand ( $n \rightarrow \pi^*$ ,  $\pi \rightarrow \pi^*$ ,  $n \rightarrow \sigma^*$ ). Comparison of the photoemf spectra and absorption spectra showed that the principal ligand - metal

Card 1/2

UDC: 541.133+543.42.062

L 41220-26

ACC NR: AP6023209

interaction occurs via the  $\sigma$  bonds. The data obtained shed some light on the mechanism of photoconductivity in chelate compounds with transition metals: in the first stage, there is a transition of electrons from the ligands to the antibonding orbital  $\sigma^*$ , localized at the metal atom (for example,  $d_{x^2-y^2}$  for Cu); in the second stage, the charge carriers are transferred to the neighboring molecule by the tunnel mechanism without any activation energy. All compounds studied were found to have hole photoconductivity. The important role of the central metal atom in the mechanism of photoconductivity is also discussed. Orig. art. has: 3 figures.

SUB CODE: 07,20/ SUBM DATE: 06Dec65/ ORIG REF: 002/ OTH REF: 002

Card 2/2MLR

ACC NR: AP6029017

SOURCE CODE: UR/0413/66/000/014/0021/0021

INVENTOR: Terent'yev, A. P.; Gracheva, R. A.; Bezruchko, V. T.

ORG: none

TITLE: Preparation of  $\alpha$ -phenylethyl carbamates. Class 12, No. 183734 [announced by Chemical Department, Moscow State University im. M. V. Lomonosov (Khimicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta)]

SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 21

TOPIC TAGS: phenylethyl carbamate preparation, phenylethyl isocyanate, phenyl compound, carbamic acid

ABSTRACT: In the proposed method,  $\alpha$ -phenylethylcarbamates are obtained by the treatment of  $\alpha$ -phenylethyl isocyanate with an alcohol at 20—80°C with subsequent removal of the alcohol by distillation in vacuo and isolation of the final product by some known method, e.g., recrystallization or distillation. [WA-50; CBE No. 11]

SUB CODE: 07/ SUBM DATE: 23Sep65/

Card 1/1

UDC: 547.495.1.07

ACC NR: AP6029017

SOURCE CODE: UR/0413/66/000/014/0021/0021

INVENTOR: Terent'yev, A. P.; Gracheva, R. A.; Bezruchko, V. T.

ORG: none

TITLE: Preparation of  $\alpha$ -phenylethyl carbamates. Class 12, No. 183734 {announced by Chemical Department, Moscow State University im. M. V. Lomonosov (Khimicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta)}

SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 21

TOPIC TAGS: phenylethyl carbamate preparation, phenylethyl isocyanate, phenyl compound, carbamic acid

ABSTRACT: In the proposed method,  $\alpha$ -phenylethylcarbamates are obtained by the treatment of  $\alpha$ -phenylethyl isocyanate with an alcohol at 20—80°C with subsequent removal of the alcohol by distillation in vacuo and isolation of the final product by some known method, e.g., recrystallization or distillation. [WA-50; CBE No. 11]

SUB CODE: 07/ SUBM DATE: 23Sep65/

Card 1/1

UDC: 547.495.1.07

ACC NR: AP6029950

SOURCE CODE: UR/0413/66/000/015/0127/0128

INVENTOR: Vzorov, M. I.; Romanov, A. S.; Yefimov, K. P.; Torenin, A. P.

ORG: none

TITLE: Actuating valve. Class 47, No. 184575

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 127-128

TOPIC TAGS: valve, actuating valve, aircraft cabin environment, aircraft cabin equipment, pressure regulator, hermetic seal

ABSTRACT: An attempt has been made to simplify the design and increase the reliability of an actuating valve for hermetic aircraft cabin previously described in Author Certificate No. 170256. In the improved valve, the pressure increment chamber of the air speed transmitter has a rigid center in the spring-loaded separating membrane which is connected with the rigid center of a 'limp' membrane;

UDC: 621.646  
629.13.01/06

Card 1/2

ACC NR: AP6029950

APPROVED FOR RELEASE: 07/16/2001

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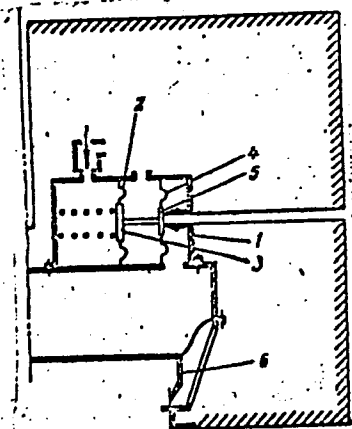


Fig. 1. Actuating valve

1 - Air speed transmitter; 2 - spring-loaded membrane; 3 - rigid center of the spring-loaded membrane; 4 - 'limp' membrane; 5 - rigid center of the 'limp' membrane; 6 - main valve.

this junction forms a venting valve connecting the cavity of the main valve with the atmosphere (see Fig. 1). Orig. art. has: 1 figure.

SUB CODE: 21/ SUBM DATE: 22Dec64

Card 2/2



ACC NR: AP6035922

SOURCE CODE: UR/0413/66/000/020/0174/0174

INVENTOR: Barinov, V. S.; Vzorov, M. I.; Perepletchikov, L. Ya.; Terenin, A. P.

ORG: none

TITLE: Regulator for build-up of pressure in an aircraft's pressurized cabin.  
Class 47, No. 187466

SOURCE: Izobreteniya, promyshlennyye obraztsey, tovarnyye znaki, no. 20, 1966, 174

TOPIC TAGS: pressure, gas pressure, pressure compensator, pressure regulator

ABSTRACT: An Author Certificate has been issued for a device for limiting pressure build-up in a pressurized aircraft cabin, which contains a throttle and a spring-supported piston with a primary valve attached to it. To avoid a pressure surge in the pressurized cabin and eliminate autovibration of the primary valve, it is equipped with a unidirectional-motion damper, the spring-loaded rod of which is pressed to the primary valve. The inner space of the piston is connected through the throttle with the pressurization circuit, on which the regulator is mounted before the pressurized cabin. Orig. art. has: 1 figure. [WA-98]

SUB CODE: 01, 14/ SUBM DATE: 01Feb65/

Card 1/1

UDC: 621.646;629.13.01/06

TERENT'YEV, A.S.

21(1)	FRASE I BOOK EXPLANATION	207/213
	International Conference on the Peaceful Use of Atomic Energy. 2nd, Geneva, 1958	
	Dobrye sovetskaya uchebnaya, podrobnaya poyasnyaya i razboryaya materialy. (Reports of Soviet Scientists; Nuclear Fuel and Materials) Moscow, Leningrad, 1959. 670 p. (Series: <u>NU</u> ; <u>NU</u> , vol. 3, 6,000 copies printed.	
	RM. (Title page): A.S. Terent'ev, Academician, A.P. Vinogradov, Academician, Y.A. Izrael'yev, Corresponding Member, USSR Academy of Sciences, and A.P. Zefirov, Doctor of Technical Sciences; Ed. (Inside book): V.V. Pavlovskiy and G.M. Povolotskiy; Tech. Ed.: E.I. Masal'.	
	PURPOSE: This volume is intended for scientists, engineers, physicists, and biologists working in the production and peaceful application of atomic energy; for professors and students of schools of higher technical education where the subject is taught; and for people interested in atomic science and technology.	
	CONTENTS: This is volume 3 of a 6-volume set of reports on atomic energy, presented by Soviet scientists at the Second International Conference on the Peaceful Use of Atomic Energy, 2nd, Geneva, 1958. The first part, edited by A.S. Terent'ev, is devoted to geology, prospecting, concentration and processing of nuclear sources material. The second part, edited by G.I. Zefirov, includes 27 reports on metallurgy, metallurgy, processing technology of nuclear fuels and reactor metals, and neutron irradiation effects on metals. The titles of the individual papers in most cases correspond word for word with those in the official English language edition on the Conference proceedings. See 207/208 for the title of the other volumes of the set.	
	207/208: A.S. Terent'ev, A.P. Vinogradov, A.P. Zefirov, and Y.A. Izrael'yev. Production of Plutonium from Synthetic Elements and Uranium (Report No. 2062)	279
	209/210: A.S. Terent'ev, A.P. Zefirov, and Y.A. Izrael'yev. Extraction of Uranium from Natural Matter (Report No. 2063)	289
	211/212: A.S. Terent'ev, A.P. Zefirov, and Y.A. Izrael'yev. Extraction of Uranium from Natural Matter (Report No. 2064)	299
	213/214: A.S. Terent'ev, A.P. Zefirov, and Y.A. Izrael'yev. Extraction of Uranium from Natural Matter (Report No. 2065)	306
	215/216: A.S. Terent'ev, A.P. Zefirov, and Y.A. Izrael'yev. Investigations on Alkaline Methods for Uranium and Plutonium Processing (Report No. 213)	379

Case 5/11

TERENT'YEV, A. V.

13044

USSR/Fish Industry Equipment 4307.0300 Nov 1947

"Mechanization in the Fish Industry for the Thirtieth Anniversary of the Great October Socialist Revolution," Engineer Mechanic A. V. Terent'yev of Giprotyba [Institute for Planning Production Enterprises of Fish and Sea Mammal Industry and Economy], 6 pp

"Rybnoye Khoz" Vol XXIII, No 11

Describes various equipment which is being used in mechanization of fish industry. Lists 24 mechanisms (including cranes, elevators, suction pumps, conveyors, presses, etc.) and their uses.

LC

13044

TERENT'YEV, A. V.

34057. Miller, B. H. i Terent'yev, A. V. puti razvitiye sovetskoy rybnodostroitelnoy gidromekhanizatsii. Ryb. khozvo, 1949, No. 11, s. 6-9

SO: Knizhnaya, Letopis', Vol. 7, 1955

TERENT'EV, A. V. and others.

Gidravlicheskaia mekhanizatsiia v rybnoi promyshlennosti. Pod. red.  
N. T. Berezina. Moskva, Fishchepromizdat, 1950. 195 p. illus.

Hydraulic mechanization in fisheries.

DLC: SH331.T4

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of  
Congress, 1953.

TERENTIYEV, A. V.

Fisheries - Sakhalin

Mechanization of the fishing industry on Sakhalin. Ryb. khoz. 28 no. 7, 1952.

9. Monthly List of Russian Accessions, Library of Congress, November 1952.  
2  
Unclassified.

1. TEREENT'YEV, A. V.
2. SSSR (600)
4. Valves
7. Composite valve for fish pump installations.  
Ryb. khoz. 28 No. 11, 1952

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

TERENT'YEV, A.V.; PETROVA, V.V., red.; DUBOVKINA, N.A., tekhn.red.

[Over-all mechanization of fish processing plants] Kompleksnaia  
mekhanizatsiia rybozavodov. Moskva, Pishchepromizdat, 1953.  
214 p.

(Fish processing plants)

(MIRA 12:3)



TERENT'YEV, A. V.

Dissertation: "Complex Mechanization of Fish-Canning Factories." Cand Tech Sci, Moscow  
Technical Inst of the Fish Industry and Economy imeni A. I. Mikoyan, 16 Jun 54.  
(Vechernyaya Moskva, Moscow 7 Jun 54)

SO: SUM 318, 23 Dec 1954

TERENT'YEV, A.V., laureat Stalinskoy premii.

[Technological progress in the fishing industry of the U.S.S.R.]  
Tekhnicheskii progress v rybnoi promyshlennosti SSSR. Moskva,  
Znanie, 1954. 39 p. (Vsesoiuznoe obshchestvo po rasprostraneniin  
politicheskikh i nauchnykh znani. Ser.4, no.1) (MLRA 7:5)  
(Fisheries)

TERENT'YEV, A.V.; MORSEV, A.N.; GUSEV, P.I.; CHERNYSHOV, I.G., redaktor;  
KUZ'MINA, V.S.; KISINA, Ye.I., redaktor.

[Construction and maintenance of centrifugal fish-pumping  
equipment] Ustroistvo i obsluzhivanie rybonasosnykh ustanovok  
tspntrobezhnogo deistviia. Moskva, Pishchepromizdat, 1955.144p.  
(MLRA 9:5)  
(Fishing--Implements and appliances) (Centrifugal pumps)

TERENT'YEV, Aleksay Vasil'yevich; MILLER, Boris Nikolayevich; CHERNILIN,  
Nikolay Filippovich; PAVLOV, Ye.G., retsenzent; CHERNYSHOV, I.G.,  
retsenzent; DORMENKO, V.V., spetsredaktor; KUZ'MINA, V.S., redaktor;  
YAROV, E.M., tekhnicheskii redaktor

[Hydraulic machinery in the fish industry] Gidravlicheskaia mekhani-  
zatsiia v rybnoi promyshlennosti. Izd. 2-oe, perer. i dop. Moskva,  
Fishchepromizdat, 1956. 299 p. (MLBA 10:1)  
(Fisheries) (Hydraulic machinery)

TERENT'YEV, A.V., kand.tekhn.nauk

Problems in over-all mechanization of the capture and primary processing of ocean herring. Trudy VNIRO 39:5-10 '59. (MIRA 14:6)  
(Herring fisheries)

TERENT'YEV, A.V., kand.tekhn.nauk

Mechanized salting of herring on medium-size trawlers in the North  
Atlantic. Trudy VNIRO 39:43-71 '59. (MIRA 14:6)  
(Atlantic Ocean—Herring fisheries) (Fish, Salt)

TERENT'YEV, Aleksey Vasil'yevich; LIKHOTA, G.N., retsenzent; ROZIN, L.N.,  
retsenzent; KOSSOVA, O.N., red.; KISINA, Ye.I., tekhn.red.

[Automated and mechanized production lines for herring  
salting and packaging on ships and in shore plants] Avtomati-  
zirovannye i mekhanizirovannye linii dlia posola i uborki sel'di  
na sudakh i beregovykh predpriatiakh. Moskva, Pishcheprom-  
izdat, 1963. 106 p. (MIRA 16:6)

(Herring fisheries—Equipment and supplies)

TERENT'YEV, Aleksey Vasil'yevich; MUKHINA, Ye.M., red.

[Overall mechanization of fishing harbors] Kompleksnaia  
mekhanizatsiia rybnykh portov. Moskva, Rybnoe khoziaistvo,  
1963. 168 p. (MIRA 17:5)



TERENT'YEV, A.V.

The MF 506 semiautomatic machine for drilling holes. ~~Biul.tekh.-~~  
ekon.inform.Gos.nauch.-issl.inst.nauch. 1 tekhn.inform. 16 no.5:  
23-24'63. (MIRA 16:7)

(Drilling and Boring machinery)

CHUPAKHIN, Vasilii Mikhaylovich; DORMENKO, Vladimir Vladimirovich;  
DRYAMOV, S.I., dots., retsenzent; MOLLAUSKIY, G.Ye.,  
dots., retsenzent; TERENT'YEV, A.V., kand. tekhn. nauk,  
spets. red.; KUZ'MINA, V.S., red.

[Technological equipment of fish processing plant] Tekhno-  
logicheskoe oborudovanie ryboobrabatyvaiushchikh predpri-  
yatii. Izd.2., perer. i dop. Moskva, Pishchevaia pro-  
myshlennost', 1964. 566 p.  
(MIRA 18:2)

CHUPAKHIN, Vasilii Mikhaylovich; DOMENKO, Vladimir Vladimirovich  
[deceased]; DRYANOV, S.I., dots., retsenzent; TEREENT'YEV,  
A.V., dots., retsenzent; KUZ'INA, V.S., red.

[Technological equipment of fish processing plants] Tekh-  
nologicheskoe oborudovanie ryboobrabatyvalushchikh pred-  
priatii. Izd.2., perer. i dop. Moskva, Fishchevaia pro-  
myshlennost', 1964. 566 p. (MIRA 17:9)

TERENT'YEV, Aleksey Vasil'yevich; SHCHEGOLIVA, K.M., retsenzent;  
CHERNYSHEV, I.G., retsenzent; KAMENSKAYA, Ye.A., red.

[Ways for automation in fish processing] Puti avtomatizatsii ob-  
rabotki ryby. Moskva, Rishchev...

191 p.

...1904.  
(MIRA 17:9)

TERENT'YEV, A.V.; GRIKOV, A.A.

New high-speed self-centering three-jaw chuck. Mashinostroyitel'  
no.3:27 Mr '65. (MIRA 12:4)

AUTHORS: Terent'yev, A.S. and Lokshin, M.A. SOV/68-58-8-3/28  
TITLE: An Increase in the Efficiency of Operation of a Jigging  
Machine for Slurries (Povysheniye effektivnosti raboty  
otsadochnoy mashiny dlya shlama)  
PERIODICAL: Koks i Khimiya, 1958, Nr 8, pp 9 - 12 (USSR)  
ABSTRACT: Re-design of the jigging machine for treatment of  
settled slurries carried out by members of the  
Dnepropetrovskiy Gornyy institut (Dnepropetrovsk Mining  
Institute) is described and illustrated. The main feature  
of re-design was a decrease in the number of pulsations  
from 185 to 30 per minute and the introduction of a baffle  
plate at the air inlet. The above measures improved the  
quality of the products: ash content in the concentrate  
decreased from 9-9.5% to 7-7.5% and increased in the  
tailings from 41-42% to 63-67%, at the ash content of  
starting product of 14-15%. There are 4 figures.  
ASSOCIATION: Makeyevskiy koksokhimicheskiy zavod (Makeyevka Coking  
Works)

Card 1/1

1. Coal--Processing 2. Machines--Performance

REPORT PRESENTED AT 2ND U.S. ATOMS-FOR-PEACE CONFERENCE

"EXTRACTION OF URANIUM FROM NATURAL WATERS" by B. N. Laskorin, G. G. Metelnikov,  
A. S. Terentyev

Report presented at 2nd U.S. Atoms-for-Peace Conference, Geneva, 9-13 Sept 1958

*TERENTYEV, A. S.*

KRYUCHKOVA, Lidiya Aleksandrovna, inzh.; GRIBANOV, N.M., red.;  
TERENT'YEV, A.S., red.; POPIYEV, V.R., red. izd-va;  
~~BELOGUROVA, I.A., tekhn. red.~~

[Wrapping and packaging of vacuum transistor and devices]  
Tara i upakovka elektrovakuumnykh i poluprovodnikovyykh pri-  
borov. Leningrad, 1962. (MIRA 16:3)  
(Packing for shipment) (Electron tubes) (Transistors)



TERENT'YEV, A. T. Cand. Agricult. Sci.

Dissertation: "Soils of the Nero-Lake Basin and Consideration of Their Peculiarities During Organization of the Area." Moscow Inst of Engineers for the Organization of Land Exploitation, 29 May 47.

SO: Vechernyaya Moskva, May, 1947 (Project #17836)

TERENT'YEV, A.T., kand.sel'skokhozyaystvennykh nauk

Dark-colored meadow soils of the Zeya-Bureya Plain. ~~As~~ur sbor.  
no.2:296-309 '60. (MIRA 15:3)

1. Deystvitel'nyy chlen Geograficheskogo obshchestva SSSR.  
(Zeya-Bureya Plain--Soils)

TERENT'YEV, B., podpolkovnik, komandir artilleriyskogo polka

Artil'erists take an examination. Zhurn. Vostok. Sil 46 no.8:59-  
60 Ap 1965. (MIRA 18:6)

01110

G/208/61/001/006/008/013  
B112/B158

21.1000

AUTHORS

El'tekov, V. A., Terent'yev, B. M., Golenko, D. I. (Moscow)

TITLE

Monte-Carlo calculations of the gamma-ray energy absorption  
in a reactor system

PERIODICAL

Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki,  
v. 1, no. 6, 1961, 1089-1096

TEXT: The authors calculate the trajectories of gamma-quanta in a reactor  
(cf Fig. 1). The trajectory of a single quantum is represented by a  
broken line.  $W_1$ ,  $W_2$ , and  $W_3$  are the probabilities of the trajectory  
ending, of a new section beginning, and of two new sections beginning,  
respectively ( $W_1 + W_2 + W_3 = 1$ ). For the length  $l$  of a section, the equation

$$\int_0^1 \mu(\vec{r} + \vec{n}\beta, \alpha) d\beta = -\ln(1 - \xi)$$

is valid, where  $\xi$  is a value within a homogeneous distribution of random  
quantities in the interval  $[0,1]$ , and where the function  $\mu$  indicates the

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31110

Monte-Carlo calculations of the...

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B112/B138

character of the medium. Figure 2 shows the programming scheme for the calculation of a trajectory. The results of several numerical computations are given. A. Kh. Breger, Yu. S. Ryabukhin, and A. F. Akkerman are thanked for assistance. There are 5 figures and 6 references: 3 Soviet and 3 non-Soviet. The three references to English-language publications read as follows: M. J. Berger. An application of the Monte-Carlo method to a problem in gamma-ray diffusion. Sympos. Monte-Carlo Methods. N. Y., John Wiley and Sons, Inc., 1956, 89-102; T. Hodberg. Monte-Carlo calculations of neutron thermalization in a heterogeneous system. Aktiesolaget atomenergi, Stockholm, 1959; J. von Neumann. Various techniques used in connection with random digits. NBS Appl. Math., Ser., 1951, 12, 36.38. X

SUBMITTED: June 9, 1961

Card 2/3/2

S/057/61/031/007/013/021  
B104/B206

AUTHORS: Terent'yev, B. M., and Ryabukhin, Yu. S.

TITLE: Absorption of  $\gamma$ -radiation in infinite systems

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 31, no. 7, 1961, 837 - 842

TEXT: The energy distribution in space of  $\gamma$  quanta in a homogeneous, unbounded medium, the quanta being emitted by a point source, was investigated by B. V. Novozhilov (ZhETF, 33, no. 5, 1287, 1957) using diffusion-age approximation. This approximation is only applicable if the condition  $l \partial n / \partial s \ll n$  (1) is fulfilled.  $l$  is the mean free path of the quantum with the age  $s$ ;  $\partial n / \partial s$  is the density gradient of quanta with this age at the distance  $r$ . It is shown that with sufficiently small energies this condition is not fulfilled in the case of a point source. But if  $\gamma$  sources are uniformly distributed in an unbounded, homogeneous medium, the distribution function does not depend on the space coordinates and the directions of motion of the quanta. Thus, (1) is fulfilled and an age approximation can be used instead of a diffusion-age approximation. Thus the system of equations

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B104/B206

Absorption of  $\gamma$ -radiation ...

$$\frac{dq(\tau)}{d\tau} = -x(\tau) q(\tau), \quad (2)$$

$$x(\lambda) = \frac{1}{3} \int_{\lambda_0}^{\lambda} d\lambda' [\mu_p(\lambda') \xi(\lambda')]^{-1},$$

$$x(\tau) = 3\mu_p(\lambda) \mu_k(\lambda) \xi(\lambda),$$

for the quanta density can be given.  $\xi$  is the mean change of the wavelength of the  $\gamma$ -quanta due to Compton scattering,  $q(\tau)|_{\tau=0} = S\delta(\lambda - \lambda_0)$  the initial condition,  $S$  the power of the monoenergetic sources in quanta/cm<sup>3</sup>·sec;  $\lambda_0$  is the wavelength of the sources in Compton units ( $\lambda = mc^2/h\nu$ ;  $mc^2 = 0.51$  Mev;  $h\nu$  is the quantum energy in Mev);  $\mu_p(\lambda)$  and  $\mu_k(\lambda)$  are linear coefficients of the photoelectric effect and Compton process. The solution of (2) can be easily given by

$$q(\tau) = q(\lambda) = S \exp \left\{ - \int_{\lambda_0}^{\lambda} \frac{\mu_p(\lambda')}{\mu_k(\lambda') \xi(\lambda')} d\lambda' \right\} \quad (3)$$

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Absorption of  $\gamma$ -radiation...

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B104/B206

the  $\gamma$ -quanta flux can be expressed by

$$F(\lambda) = cn(\lambda) = \frac{S}{\mu_{\Sigma}(\lambda) \xi(\lambda)} \exp \left\{ - \int_1^{\lambda} \frac{\mu_{\Phi}(\lambda') d\lambda'}{\mu_{\Sigma}(\lambda') \xi(\lambda')} \right\}. \quad (5)$$

Comparisons with results by U. Fano et al. (J. Res. of NBS, 59, 3, 207, 1957) showed that the solution (5) conforms with that by Fano. The authors obtain

$$E_{\gamma, \text{abs}} = S \frac{\gamma(h\nu_0)}{\mu(h\nu_0)} h\nu_0 + \int_{\lambda_0}^{\lambda_{\text{res}}} \gamma(\lambda) h\nu F(\lambda) d\lambda, \quad (7)$$

for the energy absorbed by the unit volume of an unlimited, homogeneous medium.  $F(\lambda)$  corresponds to (5);  $\gamma(h\nu_0)$  is the energy transfer coefficient;  $\mu(h\nu_0)$  is the linear total attenuation factor of  $\gamma$  radiation. The first expression in (7) describes the absorption of the original radiation, the second that of the repeatedly scattered radiation. After a short discussion

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Absorption of  $\gamma$ -radiation...

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sion of the accuracy of (7), the authors deal with the main problem of their investigation. They study the absorption of  $\gamma$  radiation in complex systems consisting of radiation sources and irradiated volumes (e.g., a "tubular heat exchanger", where the tubes are the radiation sources). The authors investigated, as an example, the irradiator of an indium-gallium radiation cycle of the type "tubular heat exchanger". The volume concentration of the In-Ga alloy was 5%, that of the water 95%; the alloy contained 22 percent by volume In. The relative distribution of the  $\gamma$  radiation was determined. Under the assumption that the age approximation is applicable, it was possible to separate the energy absorbed in the alloy (source) from that absorbed in water (irradiator).

$$E_{\text{source}} = S \left( \frac{\gamma(h\nu_0)}{\mu(h\nu_0)} \right)_{\text{source}} h\nu_0 +$$

$$+ S m c^2 \int_{\lambda_0}^{\lambda_{\text{max}}} \left[ \frac{\gamma(\lambda)}{\lambda \mu_{\text{H}_2\text{O}}(\lambda) \xi(\lambda)} \right]_{\text{source}} \exp \left\{ - \int_{\lambda_0}^{\lambda} \left( \frac{\mu_{\text{H}_2\text{O}}(\lambda)}{\mu_{\text{H}_2\text{O}}(\lambda) \xi(\lambda)} \right)_{\text{source}} d\lambda \right\} d\lambda. \quad (9)$$

was obtained, where for the respective component,  $\{\gamma(\lambda)\}_{\text{mech}}$  must be  
Card 4/5

Absorption of  $\gamma$ -radiation...

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B104/B206

replaced by  $\{\gamma \alpha\}_1$ . Calculations for various lines, for which the initial energies of the sources were assumed to be differently strong, showed that with energy reduction of the initial radiation, an all the greater part of the  $\gamma$  radiation energy is absorbed in the substance of the source. There are 1 figure and 10 references: 7 Soviet-bloc and 3 non-Soviet-bloc. The references to English-language publications read as follows: H. Goldstein et al., Final Report, No. 10, 3075. 1954; P. R. Karr, Phys. Rev., 76, 1843, 1949.

ASSOCIATION: Ordena Trudovogo Krasnogo Znami Nauchno-issledovatel'skiy fiziko-khimicheskiy Institut im. L. Ya. Karpova ("Order of the Red Banner of Labor" Scientific Physicochemical Research Institute imen L. Ya. Karpov)

Card 5/5

TERENT'YEV, B.M.; EL'TEKOV, V.A.; RYABUKHIN, Yu.S.

Absorption of gamma rays in infinite lattice systems. Atom.  
energ. 13 no.6:568-571 D '62. (MIRA 15:12)  
(Gamma rays) (Crystal lattices)

TERENT'YEV, B.M.; EL'TEKOV, V.A.; GOLENKO, D.I.

Calculating the absorption of gamma-radiation energy in heterogeneous macrosystems. Atom. energ. 15 no.5:382-386 N '63. (MIRA 16:12)

L 12421-63

EW(m)/BDS AFFTC/ASD

ACCESSION NR: AP3001114

S/0020/63/150/004/0866/0869

63  
57

AUTHOR: Breger, A. Kh.; Elatekov, V. A.; Tarent'yev, B. M.; Vaynshteyn, B. I.;  
Cyrkus, N. P.; Krasnoshchekova, N. A.; Osipov, V. P.; Gol'din, V. A.

TITLE: <sup>19</sup> Absorption of Gamma-radiation energy in macrosystems.

SOURCE: in SSSR. Doklady, v. 150, no. 4, 1963, 866-869

TOPIC TAGS: absorption of energy of Gamma-radiation, Type K-60000 apparatus

ABSTRACT: The energy coefficient of net efficiency of Gamma-radiation, and the value of the cumulative factor of integral current capacity of Gamma-radiation were determined for model apparatus of heat exchanger and tubular, still-type pipe. These determinations were obtained by three non-related methods: statistical method of investigation by an electronic computer, experimental method, and calculation by a semiempirical method. The results based on 300 samples are quite representative. The life span of a single quantum for the heat exchanger was found to be 4 sec. and for the still-type pipe, it was 2 sec. Calculations were also made for other values of energy coefficients of net efficiency. The integral absorption capacity for the given models were determined experimentally by ferrosulfate dosimetry method. The satisfactory agreement of the results

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L 12421-63

ACCESSION NR: AP3001414

with all three methods confirms the validity of the program and the methods of calculation. A possibility exists for a tangible method of solution of the problem for an optimum construction of an apparatus and the optimum number and activity of the radiation source. "The authors express their gratitude to Voropayev, Yu. V., Ratov, A. B., Kasatkin, V. M., Kalmykova, Ye. D., and Shalyapin, N. K. for their help in conducting the experiments on the type K-60000 unit, as well as to Golenko, D. I. for a number of useful hints in programming this work. Orig. arb. has: 2 tables, 2 graphs and 1 figure.

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova (Physico-Chemical Institute)

SUBMITTED: 03May62

DATE ACQ: 01Jul63

ENCL: 00

SUB CODE: 00

NO REF SOV: 008

OTHER: 000

Card 2/2

ACCESSION NR: AP4029688

S/0089/64/016/004/0291/0295

AUTHORS: El'tekov, V.A.; Terent'yev, B.M.; Panchvidze, M.V.

TITLE: The gamma-radiation spectrum and partial magnitudes of absorbed energy in an arbitrary homogeneous mixture.

SOURCE: Atomnaya energiya, v.16, no.4, 1964, 291-295

TOPIC TAGS: gamma quanta density, spectral density, radiation spectrum, homogeneous mixture, age equation, dimensionless wave, Compton collision, quantum degradation

ABSTRACT: This report discusses the approximate methods of changing from an accurate integral equation of the spectral density of gamma-quanta to a differential equation of the first order. The gamma-radiation spectrum in a homogeneous medium with evenly distributed radiation sources can be calculated by the age-theory approximation method. Although a number of numerical methods produce a more accurate solution, the advantage of the age approximation method is that it facilitates a solution in the form of quadratures in connection with any substance or mixture of substances as well as arbitrary source spectrum.

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ACCESSION NR: AP4029688

A method involving the use of Compton collisions is offered whereby an age equation can be obtained from an accurate integral equation for the spectral density of gamma-quanta. An infinite homogeneous system with evenly distributed sources can be used as a design model for certain special cases involving radiochemical apparatuses whose overall dimensions are so large that the edge effect may be disregarded, while the thickness of the sources and the distances between them are so small that the system may be considered as a quasi-homogeneous mixture of sources and irradiated components. It is possible that a better selection of the assigned functions would make the deviations of the individual approximate values of spectral density much smaller than in the above-discussed cases. "The authors express their gratitude to A.Kh. Breger for his interest in and attention to the project." Orig. art. has: 1 figure, 16 formulas and 2 tables.

ASSOCIATION: None

SUBMITTED: 20Jun63 / DATE ACQ: 01May64

ENCL: 00

SUB CODE: PH, NS

NR REF SOV: 004

OTHER: 004

Card 2/2



L 14677-66 EWT(m) DIAAP DM  
AUC NR: AP6008261

SOURCE CODE: UR/0089/65/019/002/0196/0199

AUTHOR: Torent'yev, B. M.; El'tekov, V. A.; Breger, A. Kh. 74  
B

ORG: none

TITLE: Absorption of gamma ray energy<sup>19</sup> by point sources in macrosystems

SOURCE: Atomnaya energiya, v. 19, no. 2, 1965, 196-199

TOPIC TAGS: gamma ray absorption, radiation source, Monte Carlo method, cobalt, cesium, isotope, radiation instrument

ABSTRACT: The efficiency of radiochemical devices was analyzed considering  $\eta$  the ratio of gamma radiation absorbed in the reactive volume of the device to the  $\gamma$  energy emitted by radiation source. The  $\eta$  value for two radiochemical devices was computed by the volume integration method and by the Monte Carlo method. Calculations for the first model consisted of a sphere R filled with a water-equivalent substance and  $^{60}\text{Co}$  and  $^{137}\text{Cs}$  point sources. Data derived by Monte Carlo method coincided with 1 to 2%, indicating negligible reverse scattering from the medium. The macrosystem of cylindrical configuration with a point  $\gamma$  source was taken as the

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UDC: 539.106  
2

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ACC NR: AP6008261

second model. The results of the Monte Carlo calculations of the  $\gamma$ -radiation efficiency of a water-equivalent finite dimension cylinder (5 to 60 cm in radius and 5 to 200 cm in height) was plotted for various source distributions. The results of the calculations for finite cylinders made by the method of integration and Monte Carlo method were in good agreement at the quantum energy  $E_0 = 1.25$  Mev. Tabulated data are given also for the efficiency of macrosystems (cylinder-point source) calculated by various methods at 0.65 Mev energy. The results showed that the derived integration and asymptotic formulas can be used for practical computations. Orig. art. has: 2 figures, 3 formulas, and 1 table. NA

SUB CODE: 18, 20 / SUBM DATE: 20Aug64 / ORIG REF: 005 / OTH REF: 001

Card 2/2 *MC*

TERENT'YEV, B.P.; SMETANIN, V.A., red.; MOROZOVA, T.M., tekhn. red.

[Electric power supply for radio systems] Elektropitanie  
radioustroistv. Moskva, Sviaz'izdat, 1951. 251 p.  
(MIRA 16:8)

(Electric power supply to apparatus)  
(Electric current rectifiers)  
(Radio—Equipment and supplies)

USSR/Electricity - Interference  
High-Frequency Generators  
Mar 52

"Combating Interference From High-Frequency Industrial Generators," Prof B. P. Terent'yev, Dr Tech Sci, Moscow Electromech Inst of Communications

"Elektrichestvo" No 3, pp 60-64

A Radio Inspectorate has been set up in the Min of Communications to work out measures to reduce interference to radio reception. The need for such measures is illustrated by the fact that the GZ-46 generator when unshielded creates a field of 5,000  $\mu\text{V}/\text{m}$ , at a distance of 100 m, whereas the permissible value is 250  $\mu\text{V}/\text{m}$ . Recommends protective equipment for eliminating or considerably reducing interference where it originates. Submitted 25 Oct 51.

240734

TERENT'YEV, B. P.

TERENT'YEV, B. P.

TERENT'YEV, B. P.

Terent'yev, B. P. defended his Doctor's dissertation in the Moscow Electrical Engineering Institute of Communications, USSR, on 24 April 1943, for the academic degree of Doctor of Technical Sciences.

Dissertation: "Electric Power Supply for Radio Equipment". Resume:  
A book with the above title, authorized as a text for communications vtuzes by the Ministry of Higher Education USSR, was presented as a dissertation. The book consists of the following sections: 1. Rectifiers and Ripple Filters, 2. Voltage Regulations and Stabilization, 3. Chemical Sources of Current, and 4. Electric Power Supply of Radio Centers. There is in addition a chapter on vibrator converters. At the end of the book is an annex of text material for concrete planning.

Official Opponents: Profs. A. L. Mints (Corrsp. Mbr. Academy of Sciences, USSR); I. Ye. Goron and P. A. Ostryakov (Doctors of Technical Sciences).

SO: Elektrichestvo, No. 7, Moscow, August 1953, pp 87-92 (W/22844, 16 Apr 54)

USER/Electronics - Voltage rectifiers

Card 1/1      Pub. 133 - 5/19

Authors      : Terent'yev, B. P., and Akseyenov, V. N.

Title        : Electronic control and protection of voltage rectifiers

Periodical   : Vest. svyazi 6, 8-11, June 1955

Abstract    : A description of an electronic control and a voltage rectifier, incorporating a protection device consisting of two sensing elements installed on both AC and DC circuits, is presented. The operation and phase control of ion rectifiers, by means of voltage impulses, is briefly explained. Diagrams.

Institution : .....

Submitted   : .....

Category : USSR/Radiophysics - Radio Measurements

I-8

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 4605

Author : Terent'ev, B.P.

Title : High Frequency Wattmeter.

Orig Pub : Elektrosvyaz', 1956, No 7, 42-49

Abstract : Discussion of the principle of operation of the circuit, and of the design procedure for a wide-band wattmeter, measuring the power flowing in a one or two-conductor feeder. A brief technical description of a model, intended for the measurement of powers up to 15 kw over a range of 4 -- 20 mc, is given. The indicating instrument is a moving-coil milliammeter, in which the magnet is replaced by an electromagnet. In the circuit of the wattmeter proper, circuit, the coil of the instrument are connected through bridges of semiconductor diodes. The measurement error does not exceed  $\pm 5\%$ .

Card : 1/1

TERENT'YEV, B.P.; ROZENTSVEYG, I.Ye.; SHTEYN, B.B.; SANKIN, N.M., otv.red.;  
BOVIKOVA, Ye.S., red.; MAZEL', Ye.I., tekhn.red.

[Laboratory work with radio transmitting equipment] Laboratornyi  
praktikum po radioperedaiushchim ustroistvam. Moskva, Gos.izd-vo  
lit-ry po voprosam svyazi i radio, 1957. 253 p. (MIRA 11:2)  
(Radio--Transmitters and transmission)



TERENT'YEV, B. P.

COMMUNICATION

"Electronic Telegraph Apparatus," by B. P. Terent'yev, Elektrosvyaz,  
No 6, June 1957, pp 52-57

Description of a telegraphic letter-printing apparatus in which all the basic operations (formation of code transmission, synchronization, decoding at the receiver, etc.) are performed with the aid of vacuum tubes. The circuit of the electronic portion of the apparatus is given and the mechanical parts of a model of the apparatus are briefly described.

Card 1/1

- 16 -

9(2,4)

PHASE I BOOK EXPLOITATION SOV/1554

Terent'yev, Boris Petrovich

Elektropitaniye radioustroystv (Electric Power Supply for Radio Equipment) 2nd ed., rev. and enl. Moscow, Svyaz'izdat, 1958. 239 p. 25,000 copies printed.

Resp. Ed.: K.B. Mazel'; Ed.: Ye. S. Novikova; Tech. Ed.: K.G. Markoch.

PURPOSE: This book was approved by the Ministry of Communications, USSR, as a textbook for students of communications tekhnikums.

COVERAGE: The book discusses sources and methods of power supply for various types of radio facilities. It describes the design and operation of rectifiers for various load conditions and applications and discusses filters, current and voltage regulators, converters and transformers. The appendixes list basic specifications of vacuum- and gas-tubes

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Electric Power Supply (Cont.)

SOV/1554

used in power supply systems. This second edition of the book contains the following changes: the chapter on voltage regulation was rewritten entirely and provided with detailed diagrams of voltage regulators and methods of calculation; a new chapter was added describing voltage multiplication systems and calculation procedures; the chapter on the control and protection of high-duty rectifiers was rewritten, and supplemented with a detailed diagram of vacuum -tube control of a rectifier; the chapters on power supply of radio receiving centers and relay stations were substantially revised. The author thanks I. Ye. Rozentsveyg for his help. There are 19 references of which 18 are Soviet and 1 German.

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Electric Power Supply (Cont.)

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